

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

MICHAEL PHILIP KAUFMAN,

Plaintiff,

v.

MICROSOFT CORPORATION,

Defendant.

Case No. 16-CV-02880-AKH

**MEMORANDUM OF LAW IN SUPPORT OF MICROSOFT'S MOTION FOR
SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 112**

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Defendant Microsoft Corporation files this memorandum in support of its motion for summary judgment for invalidity under 35 U.S.C. § 112.

I. INTRODUCTION

The Patent Laws of the United States represent a *quid pro quo* between the government and inventors, in order “to promote the progress of science and the useful arts.” U.S. Const. Art. I, § 8, cl. 8. The government awards patents—exclusive property rights given for a limited time—in exchange for inventors sharing their discoveries in a way that (a) demonstrates that they actually possess the claimed invention, and (b) teaches others in the field how to make and use it. 35 U.S.C. § 112 ¶¶ 1, 2 (1975) (pre-AIA). If an inventor fails to do that, he is not entitled to a patent because he has not held up his end of the bargain. That is what has happened here. Plaintiff Michael Phillip Kaufman, and co-inventor Micah Silverman, failed to uphold their end of the bargain by failing to describe their alleged invention under the Patent Laws. That failure renders the patent-in-suit invalid.

The intrinsic record for United States Patent No. 7,885,981 (the ’981 patent), the testimony of plaintiff and lead inventor Mr. Kaufman, and the testimony of his expert, Professor Dennis Shasha, all confirm there is no genuine issue of material fact regarding patent invalidity under 35 U.S.C. § 112, ¶¶ 1 and 2. Microsoft therefore moves this Court to enter summary judgment of invalidity on three independent grounds. *First*, the asserted claims of the ’981 patent are invalid under 35 U.S.C. § 112 for failure to satisfy the written description requirement. *Second*, the asserted claims of the ’981 patent are invalid under 35 U.S.C. § 112 for failure to satisfy the enablement requirement. And *third*, claims 4 and 5 are invalid under 35 U.S.C. § 112 as indefinite because they claim functions that have no corresponding structure in the patent specification.

II. FACTUAL BACKGROUND

The purported invention embodied in the '981 patent pertains to automatically creating a “complete and functional user interface (UI) for any arbitrarily complex or large database schema, without any custom software programming.” Rule 56.1 Statement of Undisputed Material Facts in Support of Microsoft’s Motion for Summary Judgment of Invalidity Under 35 U.S.C. § 112 (“SUMF”) ¶ 3; '981 patent (Pt. 1), D.I. 40-6 at 40, col. 3:9–12. What is claimed in the '981 patent relates to a purportedly preferred embodiment of a “user interface paradigm comprising a set of modes” “and a corresponding display format for each mode.” SUMF ¶¶ 4–6; '981 patent (Pt. 2), D.I. 40-7 at 118, claims 1, 4 and 5. This set of user interface modes is in contrast to an alternative embodiment briefly mentioned in the '981 patent, which pertains to a “modeless” user interface in which “end-user activities (browsing, searching, editing, adding) are supported by a single, unified display context (such as a ‘spreadsheet’ display).” SUMF ¶ 9; '981 patent (Pt. 1), D.I. 40-6 at 44, col. 11:19–22).

The Court-entered constructions and the plain English words of the claims make clear they require at least four user interface modes—(1) create, (2) retrieve, (3) update, and (4) delete—and that there is “a corresponding display format for each mode.” The term “display format” is defined as “a screen or window layout.” D.I. 69 at 4. Each of the four recited “modes” in the claims (“create,” “retrieve,” “update,” and “delete”) are functionally described as “[a] mode of interaction through which a user may” perform the recited operation, e.g., create, retrieve, update or delete. *Id.* at 3–4. In other words, there are four screens or window layouts: (1) one for the create mode through which the user may insert a new record (row) into a database table; (2) one for the retrieve mode through which the user may call up one or more records from the database; (3) one for the update mode, through which a user may modify (edit) the data

within a record of a database table; and (4) one for the delete mode through which a user may eliminate a record from a database table. *Id.*

However, more is required by the claims. This four-screen user interface is further required to “integrate into each said mode display processes for representing, navigating, and managing said relationships across tables . . . while observing and enforcing relational interdependencies among data across said tables.” SUMF ¶ 8. The term “each” is a plain English word that needs no construction by the Court. It is used to refer to every one of two or more things, which is exactly how Mr. Kaufman presented the subject language during prosecution of the ’981 patent when he distinguished his claims over the prior art applied by the United States Patent & Trademark Office (“USPTO”). SUMF ¶ 11; ’981 patent file history (Pt. 2), D.I. 40-9 at 144–45 (Preliminary Amendment (Oct. 26, 2007)) (“the client application integrates, into each mode display, processes . . .”).

III. LEGAL STANDARDS

A. Summary Judgment

Summary judgment is appropriate if, viewing the evidence and drawing all reasonable inferences in a light most favorable to the nonmoving party, there are no genuine issues of material fact, and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a); *Celotext Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986). At the summary judgment stage, the Court “does not assess the credibility or weigh the evidence, but simply determines whether there is a genuine issue of fact for trial.” *House v. Bell*, 547 U.S. 518, 559–60 (2006). A fact is *material* if it “might alter the outcome of the suit under the governing law.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute as to a material fact is *genuine* if there is sufficient evidence for a reasonable trier of fact to decide in favor of the nonmoving party. *See*

id. “If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Id.* at 249–50 (internal citations omitted).

The moving party bears the initial burden of identifying those portions of the pleadings, discovery, and affidavits that demonstrate the absence of a genuine issue of material fact. *Celotext*, 477 U.S. at 323. Once the moving party meets its burden, the nonmoving party must set forth, by affidavit or as otherwise provided in Rule 56, “specific facts showing that there is a genuine issue for trial.” *Anderson*, 477 U.S. at 250 (internal quotations omitted). To defeat a motion for summary judgment, the nonmoving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co., Ltd., v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986); *see also Hicks v. Baines*, 593 F.3d 159, 166 (2d Cir. 2010) (“[A] party may not rely on mere speculation or conjecture as to the true nature of the facts to overcome a motion for summary judgment. . . . [M]ere conclusory allegations or denials . . . cannot by themselves create a genuine issue of material fact where none would otherwise exist.” (quoting *Fletcher v. ATEX, Inc.*, 68 F.3d 1451, 1456 (2d Cir. 1995))). The “mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment”; a factual dispute is genuine only where “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson*, 477 U.S. at 247–48. Accordingly, the “mere existence of a scintilla of evidence” in support of the nonmoving party’s position is insufficient to defeat a motion for summary judgment: there must be “evidence on which the jury could reasonably find” for the nonmoving party. *Id.* at 252.

Summary judgment is appropriate in a patent case as in any other, including on 35 U.S.C. § 112 issues. *PowerOasis, Inc. et al. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305–06 (Fed. Cir. 2008) (affirming summary judgment of invalidity based on § 112 issues); *see also EON Corp. IP*

Holdings LLC v. AT & T Mobility LLC, 785 F.3d 616, 619 (Fed. Cir. 2015) (affirming the district court’s grant of summary judgment of invalidity for failure to meet the definiteness requirement of § 112, ¶ 2); *Promega Corp. v. Life Techs. Corp.*, 773 F.3d 1338, 1358 (Fed. Cir. 2014), rev’d on other grounds, 137 S. Ct. 734 (2017) (reversing district court’s denial of summary judgment of invalidity for lack of enablement under § 112, ¶ 1); *Atl. Research Mktg. Sys., Inc. v. Troy*, 659 F.3d 1345 (Fed. Cir. 2011) (affirming the district court’s grant of summary judgment of invalidity under the written description requirement of § 112, ¶ 1); *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368 (Fed. Cir. 2009) (same); *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc. (d/b/a The Home Depot)*, 412 F.3d 1291, 1293 (Fed. Cir. 2005) (affirming grant of summary judgment that all claims of patent were invalid as indefinite).

B. 35 U.S.C. § 112

Enablement and written description are separate and distinct requirements contained in 35 U.S.C. § 112, ¶ 1. *Lizardtech, Inc. v. Earth Resource Mapping*, 424 F.3d 1336, 1344–45 (Fed. Cir. 2005); *Ariad Pharm, Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1344 (Fed. Cir. 2010). The ’981 patent issued in February 2011, before amendment of the Patent Laws by the America Invents Act (“AIA”). Thus, the pre-AIA version of 35 U.S.C. § 112 applies in this case. It reads, with emphasis added:

The specification shall contain a *written description of the invention*, and of the manner and process of making and using it, *in such full, clear, concise, and exact terms as to enable* any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same . . . []

35 U.S.C. § 112, ¶ 1 (1975). Any patent claim that does not satisfy these requirements of 35 U.S.C. § 112 is invalid.

1. Written Description

To satisfy the written description requirement, the application must “convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession of the invention.” *PowerOasis*, 522 F.3d at 1306 (citing *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991)) (emphasis in original). “The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. Rather, [it] must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought.” *Id.* (citing *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)); see also *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998). If the claimed elements are not properly disclosed, the claim is invalid for failing to satisfy the written description requirement.

2. Enablement

The enablement requirement set forth in 35 U.S.C. § 112, ¶ 1 requires that the specification describes “the manner and process of making and using [the invention], in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is more nearly connected, to make and use the same.” The enablement requirement is satisfied when “one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation.” *Liebel-Flarsheim Co. et al., v. Medrad, Inc.*, 481 F.3d 1371, 1378 (Fed. Cir. 2007) (citing to *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1238–39 (Fed. Cir. 2003)). Experimentation is undue if it requires “ingenuity beyond that to be expected of one of ordinary skill in the art.” *Fields v. Conover*, 443 F.2d 1386, 1391 (C.C.P.A. 1971); see *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988) (Factors to be considered in determining whether experimentation is undue include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or

absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.). Furthermore, the *full scope* of the claim must be enabled. *Liebel-Flarsheim*, 481 F.3d at 1378–79. If the full scope of the claim is not enabled, the claim is invalid for failing to satisfy the enablement requirement.

C. Definiteness and Means-Plus-Function Claims

Section 112 also requires that, for certain types of claims, the structure, material or acts for performing what is claimed must be recited in the specification:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts *described in the specification* and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (Pre-AIA) (emphasis added).

Historically, the use of the term “means” in the claim created a rebuttable presumption that 35 U.S.C. § 112, ¶ 6 applies. The standard today is “whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). Generic terms like “module,” “mechanism,” “element,” “device,” and “other nonce words that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means’ because they ‘do not connote sufficiently definite structure’ and therefore may invoke § 112, ¶ 6.” *Id.* at 1350 (quoting *Mass. Inst. of Tech. & Elecs. for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006)); *see also Verint Sys. Inc. v. Red Box Records Ltd.*, 166 F. Supp. 3d 364, 384 (S.D.N.Y. 2016) (finding the module of the claimed “analysis module . . . configured to” perform a function was “a black box nonce term”). *See generally* M.P.E.P. § 2181; *Zscaler Inc. v. Symantec Corp.*, IPR2018-

00916, 2018 WL 6016842, at *4 (Nov. 15, 2018) (“[T]he words ‘manager’ and ‘module,’ when referring to computer routines, were considered to indicate means plus function treatment and the lack of structure”); *Epic Tech., LLC v. Fitnow, Inc.*, 151 F. Supp. 3d 1245, 1251 (D. Utah 2015).

Once a claim is found to be subject to 35 U.S.C. § 112, ¶ 6, “the court must then determine what structure, if any, disclosed in the specification corresponds to that claimed function. Where there are multiple claimed functions, as we have here, the patentee must disclose adequate corresponding structure to perform all the claimed functions.” *Williamson*, 792 F.3d at 1351–52. “The inquiry is whether one of skill in the art would understand the specification itself to disclose a structure, not simply whether that person would be capable of implementing a structure.” *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 948 (Fed. Cir. 2007). “The corresponding structure for a § 112, ¶ 6 claim for a computer-implemented function is the algorithm disclosed in the specification.” *Aristocrat Techs. Australia Pty. Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). A patent claim that fails to disclose corresponding structure is invalid for indefiniteness under 35 U.S.C. § 112, ¶ 2. *See Williamson*, 792 F.3d at 1352.

IV. ARGUMENT

Critical to this motion are two issues in the claims. The first is the so-called “delete” mode display format recited in each independent claim. The second is the language found in subpart (c) of each independent claim—“integrates into *each* said mode display processes for representing, navigating, and managing said relationships across tables.” *See* SUMF ¶ 8; ‘981 patent (Pt. 2), D.I. 40-7 at 118, col. 377:31–33 (claim 1); col. 378:14–16 (claim 4); and col. 378:47–49 (claim 5). The Court defined the three functions that were to be integrated into each of the four modes, two of which are identified below:

- “navigating . . . said relationships across tables”: moving from one display of data to a related display of data
- “managing . . . said relationships across tables”: avoiding the insertion of inappropriate data in and across tables

D.I. 69 at 4.

There is no support in the specification for these limitations as it pertains to two of the claimed modes: the retrieve mode and the delete mode. There is also no support in the specification for the last limitation in the claims (“while observing and enforcing relational interdependencies among data across tables”) in the retrieve and delete modes. Apparently in recognition of the inconsistency between the claims and the specification, Mr. Kaufman attempts to salvage the claims by ignoring the word “each” used in the claims, and arguing his “user interface paradigm” comprising a plurality of “modes” is satisfied by the opposite embodiment distinguished in the specification—a mode~~less~~ one. The Court cannot reform his claims in the manner he seeks. *See, e.g., Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374–75 (Fed. Cir. 2004) (refusing to replace the word “to” with the word “at” when the claimed process could not perform its intended function).

A. The '981 Patent Fails To Disclose The Claimed Delete Mode and Inadequately Discloses The Claimed Retrieve Mode

Mr. Kaufman filed the continuation application that resulted in the '981 patent on October 26, 2007. SUMF ¶ 2. It was in this 2007 filing that the claims first referred to a “user interface paradigm comprising a set of modes,” a “delete mode,” “display formats” and various functions “integrate[d] into each.” SUMF ¶ 10; *see, e.g.*, '981 patent file history (Pt. 2), D.I. 40-9 at 140–42 (Preliminary Amendment (Oct. 26, 2007)); *compare* U.S Patent No. 7,318,066 file history (Pt. 1), D.I. 40-10 at 62 (June 15, 2007 claim amendments referring to “support for

creating, retrieving, updating and deleting” but not to a “user interface paradigm comprising a set of modes” or “display formats” or integrating various functions into each mode).

1. There is no disclosure of a “delete” mode in the ’981 patent.

In a single sentence, the ’981 patent describes that, in the *edit mode*, a user interface may optionally have a *delete capability*. This function is described as a sub-feature in the edit mode display; in other words, it is not its own mode. The ’981 patent admits this feature is not found in the accompanying code, which is the so-called “reference implementation,” and no delete functionality is shown in any of the figures. SUMF ¶ 14. Further, no details or algorithms are provided to explain how the delete capability performs any function, just the simple suggestion a person of skill in the art could implement the capability of deleting or suppressing a record¹:

Note that, although not shown in the reference implementation, DELETE capability is also readily incorporated—as either (or both) true record-removal from the underlying table, and/or record “flagging” for UI suppression (with continued underlying-table record retention)—simply by adding (according to the user’s access rights, potentially) another pushbutton within the Edit-mode display.

’981 patent (Pt. 1), D.I. 40-6 at 41, col. 5:63–6:3.

The ’981 patent fails to provide any meaningful details of the delete mode, and Mr. Kaufman admits the patent does not implement it, he chose not to implement it, and he further doubts anyone would ever make a distinct delete mode. Ex. A (Kaufman Tr. Vol. 1) at 174:4–12 (“Q. But it’s not in the code either, correct? A. We never implemented it. I don’t think it belongs

¹ Mr. Kaufman’s expert, Prof. Shasha, also admits the code does not disclose a delete mode. Shasha Tr., D.I. 47-2 at 22:9-19 (“Q. Do you know if a delete operation was possible? A. With this . . . A delete operation with this version of the system I don’t think is possible. I don’t see any option for it. I don’t think I ever tried it because I didn’t see any option for it. And in the specification, it says it’s not available, so it’s inconsistent.”); 68:18-69:18 (“[Q.] You’re not suggesting there’s a delete operation or even a delete interface disclosed in the code; correct? A. I’m not suggesting that there’s a delete operation in the code, that’s correct.”).

in this display . . . I chose not to implement it intentionally.”), 176:14–21 (“Q. And what’s the display format for a delete mode? A. A display format is just a format that includes the delete capability, delete mode, that presents the delete capability. So for example, in my designs, it’s never a distinct mode. I don’t think any implementation ever makes it a distinct mode.”).

2. There is insufficient disclosure of the “retrieve” mode in the ’981 patent.

Mr. Kaufman contends the “retrieve” mode in the claims corresponds to the “browse” mode in the specification. SUMF ¶ 15; D.I. 39 at 16. The browse mode is depicted in Figures 1, 7, 9A, and 9C. *See* SUMF ¶ 16; ’981 patent (Pt. 1), D.I. 40-6 at 4, 32, 34, 36. In each embodiment, the URL for this user interface identifies the file name “browse.jsp” and for each depiction differs primarily in (1) how it shows the user landed on the page, and (2) the data shown from the table being browsed:

#	State or Province Number	State or Province ID	State or Province Name	Country	Entered by Users	Entry Date	Modified by Users	Last Modified Date
17	15	IN	Indiana	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
18	16	IA	Iowa	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
19	17	KS	Kansas	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
20	18	KY	Kentucky	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
21	19	LA	Louisiana	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
22	20	ME	Maine	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
23	54	MB	Manitoba	Canada	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48
24	21	MD	Maryland	USA	Kaufman, Michael Philip	10/13/2001 02:17:48	Kaufman, Michael Philip	10/13/2001 02:17:48

FIG. 1

The user interface displays the mode and source table in the top region of the display format. SUMF ¶ 17. In the case of Figure 1, the source table is identified as “STATE OR

PROVINCE” and the mode is identified as “BROWSE.” *Id.* Data from records in the “State or Province” table are shown in the middle region. *Id.* No mechanism for editing data in the subject table is provided in the browse mode because, as Mr. Kaufman explained, it is a read-only interface. *See* SUMF ¶ 18; Ex. B (Kaufman Tr. Vol. 2) at 433:23–434:20. The bottom region has buttons for moving to other records in the same table, but the ’981 patent does not disclose or depict “navigating” or “managing” “relationships across tables” in the browse (a.k.a. “retrieve”) mode. *See* Ex. A (Kaufman Tr. Vol. 1) at 184:24–185:19 (“[Q.] Does browse.jsp contain display processes for representing, navigating, and managing relationships across tables? . . . [A.] I think browse only uses representing. Q. Why do you say that? A. Well, there’s no way to traverse directly from the base table in browse to another table. There could have been. We just didn’t add it. And certainly there’s no way to manage because it’s a read-only screen and you would click the edit -- the edit link to go to a separate mode and then manage the relationship there.”); *see also* SUMF ¶ 20.

B. The Asserted Claims Fail to Satisfy the Written Description Requirement.

Because there is a complete absence of disclosure of the “delete mode” and the functions that are to be integrated into it, the delete mode fails the written description requirement. It cannot be that a sub-function, integrated into another mode (here, the edit mode in the specification, or the alleged “update” mode in the claims) satisfies the requirement that *each* mode “integrates” all functionality defined by the extensive language describing what must be integrated into each mode, which include the functions for “representing, navigating, and managing said relationships across tables.” The only disclosure is that a delete functionality is present, which is described without reference to any of the other functions required by the claim.

Again, for Mr. Kaufman to satisfy the written description requirement, the ’981 application must “convey with reasonable clarity to those skilled in the art that, as of the filing

date sought, [the inventor] was in possession of *the invention*.” *PowerOasis*, 522 F.3d at 1306 (internal citation omitted) (emphasis added); *see also id.* (“The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification [but whether] one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought.”). Here, the application does not disclose all the functions that must be “integrate[d] into each mode display,” which is, here, includes the functions that must be integrated into the “delete” mode.

That these ideas are omitted from the ’981 patent specification is confirmed by plaintiff and first named inventor Mr. Kaufman. Mr. Kaufman testified under oath that the “navigating” and “managing” functions, as well as “enforcing relational interdependencies across tables” found in limitation (c) of each claim is not found in either the “delete” mode or the “retrieve” mode. He further admits that some of the processes expressly claimed are simply “not possible” or are “nonsensical.” SUMF ¶ 20; Ex. B (Kaufman Tr. Vol. 2) at 433:2–22 (“certain processes are nonsensical in the context of certain display modes”). Specifically, Mr. Kaufman admits the process of “managing ... relationship across tables” is either not possible or nonsensical for the retrieve (a.k.a. “browse”) and delete modes. SUMF ¶ 20; Ex. A (Kaufman Tr. Vol. 1) at 185:15–19 (“And certainly there’s no way to manage because it’s a read-only screen and you would click the edit -- the edit link to go to a separate mode and then manage the relationship there.”), 188:10–17 (“[Q.] I believe you said the browse.jsp did not need to manage relationships across tables? A. Right, because managing relationships across tables necessarily entails changing the data contents of table rows. It cannot be accomplished from browse.jsp”), 188:25–189:5 (“[Q.] Your testimony was it didn’t need to. But my question was: Did it? A. No. It’s nonsensical. It -- it makes no sense in the context”); Ex. B (Kaufman Tr. Vol. 2) at 433:23–434:20 (“[I]f you’re

looking at a read-only list or browse display, there's no opportunity or meaning to managing a cross-table relationship because there's nothing that can be changed; and changing data in a relational table is how you manage the cross table relationships. So there will be no processes for managing those relationships in a browse view."), 435:15-20 ("Managing would also be inapplicable to a delete mode if the display provided nothing but delete functionality."), 436:18-437:15 ("[Q.] So with respect to a delete mode, you said that a management across database relationships would be nonsensical, right? A. Theoretically. In reality, a pure delete mode is itself nonsensical."); *see also id.* at 435:9-13 ("Q. Using that terminology, the browse mode and the retrieve mode would be the same; is that right? A Yes, although the retrieve is not limited to browse.").

Mr. Kaufman also testified that the function "enforcing relational interdependencies" needs to have a writable mode, which means "enforcing relational interdependencies" cannot be performed in the retrieve mode, because it is not writable. SUMF ¶ 21; Ex. A (Kaufman Tr. Vol. 1) at 188:4-189:5 (e.g., "Q. And I think you said something similar about enforcing relational interdependencies? . . . A. Yes, that's correct. That's the same thing as managing relationships . . . It's nonsensical. It -- it makes no sense in the context."); Ex. B (Kaufman Tr. Vol. 2) at 443:13-17 ("Q. So in a browse or retrieve, you wouldn't be able to perform the enforcement function, for example, right, because those aren't writable? A. Yes. I think so.").

If the claimed processes are either "not possible" or "nonsensical," as Mr. Kaufman admits, it defies logic that they are "convey[ed] with reasonable clarity to those skilled in the art that, as of the filing date sought, [Mr. Kaufman] was in possession of the invention."²

² Plaintiff Mr. Kaufman alleges that he is entitled to a priority date of October 31, 2001. *Nat. Alternatives Int'l, Inc. v. Iancu*, 904 F.3d 1375, 1380 (Fed. Cir. 2018) ("Patent claims 'are not entitled to an earlier priority date merely because the patentee claims priority.' Rather, 'for a

PowerOasis, 522 F.3d at 1306 (internal citation omitted). Accordingly, claims 1, 4 and 5 are invalid for failing to satisfy the written description requirement.

C. The Asserted Claims Fail to Satisfy the Enablement Requirement.

While the written description and enablement requirements are found in the same paragraph of 35 U.S.C. § 112, they must each be separately satisfied. Both essentially ask questions about the disclosure in the application to which the inventor claims priority, but the enablement question seeks an answer to a question that is a slightly broader, as to the full scope of the claimed invention: whether “one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation.” *Liebel-Flarsheim*, 481 F.3d at 1378 (quotation omitted). Whether it does enable the full scope of the claim depends on the disclosure, which has already been discussed as to the written description requirement, but in further view of “one skilled in the art.” Mr. Kaufman has said that a person of ordinary skill in the art would be a relatively low-skilled programmer who did not even have a degree. Mr. Kaufman’s expert offered this definition with his claim construction briefing, which is acceptable for the analysis here:

[A] person having an ordinary level of skill in the art at the time of the invention ... would be a person with at least about two years’ training in Computer Science who had two or more years of experience in coding end-user applications for working with data in enterprise-scale database systems, such as those database systems.

Shasha Decl., D.I. 41-1 ¶ 13.

patent’s claims to be entitled to an earlier priority date, the patentee must demonstrate that the claims meet the requirements of 35 U.S.C. § 120.” (quoting *In re NTP, Inc.*, 654 F.3d 1268, 1276 (Fed. Cir. 2011)); see *PowerOasis*, 522 F.3d at 1303–06 (affirming district court decision to place the burden on patent owner to come forward with evidence to prove entitlement to claim priority to an earlier filing date).

Regardless of the level of skill, Mr. Kaufman admits that several of the claimed functions are either nonsensical or not possible. If the claimed functions are nonsensical or not possible, then they are not enabled. To this end, Mr. Kaufman testified:

- “And certainly *there’s no way to manage* because it’s a read-only screen and you would click the edit -- the edit link to go to a separate mode and then manage the relationship there.” Ex. A (Kaufman Tr. Vol. 1) at 185:15–19 (emphasis added).
- “[Q.] I believe you said the browse.jsp did not need to manage relationships across tables? A. Right, because managing relationships across tables necessarily entails changing the data contents of table rows. *It cannot be accomplished from browse.jsp.*” *Id.* at 188:10–17 (emphasis added).
- “[Q. Y]our testimony was it didn’t need to. But my question was: Did it? A. No. *It’s nonsensical. It -- it makes no sense in the context.*” *Id.* 188:25–189:5 (emphasis added).
- “[I]f you’re looking at a read-only list or browse display, there’s *no opportunity or meaning to managing a cross-table relationship because there’s nothing that can be changed*; and changing data in a relational table is how you manage the cross table relationships. *So there will be no processes for managing those relationships in a browse view.*” Ex. B (Kaufman Tr. Vol. 2) at 434:7–15 (emphasis added).
- “*Managing would also be inapplicable to a delete mode* if the display provided nothing but delete functionality.” *Id.* at 435:18–20 (emphasis added).
- “[Q.] So with respect to a delete mode, you said that a management across database relationships would be nonsensical, right? A. Theoretically. *In reality, a pure delete mode is itself nonsensical.*” *Id.* at 436:18–22 (emphasis added).

When the inventor himself admits the disclosure is not present in the application, that what is claimed is “nonsensical,” and “inapplicable” to certain modes, and there is “no way” to accomplish the claimed invention, it defies common sense that it is enabled. The full scope of the claimed invention includes a user interface paradigm that has four modes (create, retrieve, update, and delete) and a corresponding display format for each. Further, each mode must integrate the functionality recited in limitation (c), which requires that it:

integrates into each said mode display processes for representing, navigating, and managing said relationships across tables, for

selecting among said modes, and for navigating across said tables and interacting in accordance the selected mode with the data in the tables that are reached by said navigation, while observing and enforcing relational interdependencies among data across said tables.

SUMF ¶ 8; *id.* ¶¶ 4–6; ’981 patent (Pt. 2), D.I. 40-7 at 118, col. 377:31–38 (claim 1), col. 378:14–21 (claim 4), col. 378:47–54 (claim 5).

“[A]s part of the quid pro quo of the patent bargain, the applicant’s specification must enable one of ordinary skill in the art to practice the full scope of the claimed invention.” *AK Steel*, 344 F.3d at 1244. Here, Mr. Kaufman, the plaintiff and lead inventor, admits the full scope of the claims is not enabled because “there’s no way,” for example, to perform the managing function from a read-only mode (e.g., “browse” (in the specification) or “retrieve” (in the claims)) as well as from the “delete” mode. Further, Mr. Kaufman testified that a “pure delete mode,” which is within the scope of his claims, is “nonsensical.” Accordingly, claims 1, 4 and 5 are invalid for failing to satisfy the enablement requirement.

D. Claims 4 and 5 Fail to Satisfy the Definiteness Requirement.

Claims 1 is method claim, which covers when someone or something performs the acts recited in the claim. Claims 4 and 5, however, are fashioned as apparatus claims, which are supposed to cover a physical thing—for example a device or machine. However, the body of claims 4 and 5, as Microsoft noted in its claim construction brief,³ does not further limit the structure of the device or machine, but rather focuses on the function to be achieved by reciting the method steps from claim 1. Claim 4 introduces these functions as “machine-readable routines” and claim 5 introduces these functions simply as “routines.”

³ See D.I. 40 at 27–28.

The terms “machine-readable routines” and “routines” are nonce terms that themselves connote no specific structure for the “routines” that must perform the recited functions. *See Williamson*, 792 F.3d at 1350 (finding “module,” a generic descriptor for software or hardware like “routine,” did not provide any indication of structure because “it sets forth the same black box recitation of structure for providing the same specified function as if the term ‘means’ had been used”); *see also* M.P.E.P. § 2181; *Epic Tech., LLC v. Fitnow, Inc.*, 151 F. Supp. 3d 1245, 1251 (D. Utah 2015) (discussing “routines, or other program modules” associated with a general purpose computer); *Zscaler Inc. v. Symantec Corp.*, IPR2018-00916, 2018 WL 6016842, at *4 (Nov. 15, 2018) (“the words ‘manager’ and ‘module,’ when referring to computer routines, were considered to indicate means plus function treatment and the lack of structure”). Tellingly, in July 2010, Mr. Kaufman amended claim 4 to replace the term “means for” to “machine-readable routines.” SUMF ¶ 12; ’981 patent file history (Pt. 1), D.I. 40-8 at 49–50 (Response to Non-Final Office Action (July 7, 2010)). The result, however, should be the same: the “machine readable routines” and “routines” are no different than the term “means” and thus invoke the requirements found in 35 U.S.C. § 112, ¶ 6, which allows a patentee to draft functional apparatus claims such as claims 4 and 5, but which limits the claims to the “material, structures, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347–48; *see* SUMF ¶ 22. Mr. Kaufman admitted as much in his deposition:

Q: Do you see that for each of elements A, B, and C . . . one of the amendments that was made was to remove the word ‘means’ and include in its place the phrase ‘machine-readable routines’?

A: I do.

Q: [A]s a person of ordinary skill in the art, does that edit change the scope of the claim or the meaning of the claim at all to you?

A: Not to me.

Ex. B (Kaufman Tr. Vol. 2) at 447:19–448:14.

Once the Court has determined claims 4 and 5 are subject to construction as means-plus-function claims, the Court must look to the specification to determine the appropriate corresponding structure. Under *Williamson*, the issue is what structure, if any, disclosed in the specification corresponds to the claimed function. 792 F.3d at 1352. “Simply disclosing a black box that performs the recited function is not a sufficient explanation of the algorithm required to render the means-plus-function term definite.” *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1338 (Fed. Cir. 2014).

For the same reasons recited above as to the written description requirement, claims 4 and 5 and the corresponding specification of the ’981 patent fail to disclose sufficiently definite structure for performing the recited functions in limitation (c). There is no disclosure at all of the so-called delete mode, and, further, there is no disclosure of the corresponding functions that must be integrated into it. Mr. Kaufman has further admitted certain of the functions are either not possible or nonsensical for the retrieve and delete modes. *See supra* Section IV.B & C. Because no algorithm is disclosed for the delete mode or the other functions recited in limitation (c) for the retrieve and delete modes, claims 4 and 5 are invalid under 35 U.S.C. § 112, ¶ 2. *Blackboard Inc., v. Desire2Learn Inc.*, 574 F.3d 1371, 1382–86 (Fed. Cir. 2009) (finding means-plus-function limitations in a software case invalid under 35 U.S.C. § 112, ¶ 2 when there was no corresponding structure in the specification for performing the function).

V. CONCLUSION

For the reasons stated above, Microsoft respectfully requests the Court enter judgment that claims 1, 4 and 5 are invalid as failing to satisfy each of the written description and enablement requirements under 35 U.S.C. § 112, ¶ 1, and that claims 4 and 5 are also invalid as indefinite under 35 U.S.C. § 112, ¶ 2.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on 7th day of February, 2019, a true and correct copy of the foregoing document entitled MEMORANDUM OF LAW IN SUPPORT OF MICROSOFT'S MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 112 was electronically filed with the Clerk of the Court using the CM/ECF system which will send notification of such filing to all attorneys of record.

/s/ Leah A. Edelman

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